NEW SPECIES AND COMBINATIONS IN SELINOCARPUS (NYCTAGINACEAE)

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ABSTRACT

A new species of Selinocarpus, S. maloneanus B.L. Turner, is described from the Malone Mountains of trans-Pecos, Texas, and S. lance-olatus Wooton var. megaphyllus Fowler & B.L. Turner is elevated to specific rank as S. megaphyllus (Fowler & B.L. Turner) B.L. Turner, stat. and comb. nov. These along with S. lancealus are closely related gypsophiles but appear not to intergrade, and each appears confined to its own geographic region. A key to distinguish among these is provided, along with a map showing their distributions.

KEY WORDS: Selinocarpus, Nyctaginaceae, México

Selinocarpus is a small genus of suffruticose herbs or shrubs mostly confined to xeric habitats of the southwestern U.S.A. and closely adjacent México. Nearly all of the species occur on gypseous soils. A taxonomic treatment of the genus was rendered by Fowler & Turner (1977) in which nine species were recognized, eight of these occurring in North America, one confined to northeastern Africa. The present paper adds two additional species to the genus, both of these gypsophiles.

Selinocarpus maloneanus B.L. Turner, sp. nov. TYPE: U.S.A. Texas: Hudspeth Co., gypsum quarry, N end of Malone Mts., near Finley, 29 Jul 1958, D.S. Correll & I.M. Johnston 20358 (HOLOTYPE: LL!).

Selinocarpo lanceolato Wooton similis sed differt foliis late ovatis 1.5-2.0-plo longioribus quam latioribusque prope medium latissimis apicibus abrupte mucronulatis (vs. lanceolatis 2-4-plo longioribus quam latioribusque probe basim latissimis apicibus obtusis vel acutis non mucronulatis).

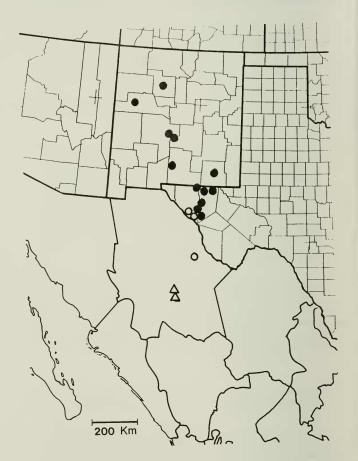


Figure 1. Distribution of Selinocarpus lanceolatus (closed circle); S. maloneanus (open circle); and S. megaphyllus (triangle).

Erect suffruticose herbs 15-30 cm high. Stems ashy white, minutely pubescent with short white flattened trichomes, arising from a ligneous, or woody, tap root. Midstem leaves mostly broadly ovate to ovate-elliptic, weakly 3-nervate, succulent, 2.6-3.0 cm long, 1.3-1.8 cm wide, 1.5-2.0 times as long as wide; petioles 2-3 mm long, the blades abruptly "greenish" or "pale yellow," abruptly terminated with a distinct mucronation. Corollas reportedly ca. 35-38 mm long, the tube ca. 30 mm long, narrowly tubular, ca. 1 mm wide throughout, the throat funnelform, abruptly flaring from the tube, ca. 12 mm across at anthesis. Anthocarps (including the wings) rectangular in outline, 6-7 mm long, 5-8 mm wide, the wings 2-4 mm wide.

ADDITIONAL SPECIMENS EXAMINED: U.S.A. Texas: Hudspeth Co., gypsum flat, SE base of Malone Mts., 5 Jul 1958, Correll & Johnston 19298 (LL); ca. 10 mi W of Sierra Blanca at the SW end of the Malone Mts., along Interstate Hwy 10, 13 Aug 1974, Spellenberg & Syversten 3744 (LL).

MEXICO. Chihuahua: Mpio. Aldama, large gyp flat, 8.8 mi E on a dirt road from Hwy 16 where it crosses the railroad (SW of Coyame), 26 May 1971, Powell 2116, with B. Fowler (TEX).

Fowler & Turner (1977) did not have access to the type materials cited above, although other less well preserved collections from the Malone Mountains were available. All of these were referred to Selinocarpus lanceolatus Wooton var. lanceolatus. The Mexican collection, cited above, was not mentioned by Fowler & Turner, but these clearly belong to what is here recognized as S. maloneanus.

Selinocarpus maloneanus is readily distinguished from S. lanceolatus by its broadly ovate to ovate-elliptic leaves which are broadest near the middle, the blades mostly 1.5 to 2.0 times as long as wide (vs. consistently lanceolate, broadest near the base, the blades mostly 2-4 times as long as wide). Both of these taxa appear closely related to Selinocarpus megaphyllus. The latter is readily distinguished by its much larger, broadly ovate to rotund leaves which are scarcely longer than broad (cf. Figure 2 in Fowler & Turner 1977). In addition, S. megaphyllus has a much larger creamy white perianth 35-40 mm long, the throat gradually flaring and ca. 25 mm across at anthesis (cf. Johnston et al. 12343, LL, not examined in our original study). An artificial key to these several taxa is provided below:

- Leaves broadly ovate to rounded, mostly 1-2 times as long as wide, the apices abruptly acuminate or apiculate, (México and Malone Mts., U.S.A., Texas).

- 2.Leaves 1.5-2.0 times as long as wide; perianth greenish to yellowish, 3.0-3.5 cm long, the throat abruptly flaring. S. maloneanus
- Leaves 1.0-1.5 times as long as wide; perianth creamy white, 3.5-4.0
 cm long, the throat gradually flaring. S. megaphyllus
- Selinocarpus megaphyllus (Fowler & B.L. Turner) B.L. Turner, stat. & comb. nov. BASIONYM: Selinocarpus lanceolatus Wooton var. megaphyllus Fowler & B.L. Turner, Phytologia 37:183. 1977.

When originally described, this taxon was known to its authors only by type material (Chihuahua: gypsum soils ca. 15 mi SW of Estación Moreón along the road to Río Conchos). A single (unicate) subsequent collection has been made by M.C. Johnston et al. 12943 (Mina Las Playas, 1 km S of Mina Cerro Prieto on road to Julimes, ca. 31 km by winding road N of Julimes, ca. 1300 m, "gyp anhydrite gypsum," 25 Aug 1973, LL).

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LITERATURE CITED

Fowler, B.A. & B.L. Turner. 1977. Taxonomy of Selinocarpus and Ammocodon (Nyctaginaceae). Phytologia 37:177-208.